# RECLAMATION Managing Water in the West

Funding Opportunity Announcement No. R10SF80157

## WaterSMART:

# Water and Energy Efficiency Grants for FY2010





U.S. Department of the Interior Policy and Administration Bureau of Reclamation Denver. Colorado

#### **Mission Statements**

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

## **Synopsis**

Federal Agency Name:	Department of the Interior, Bureau of Reclamation, Policy and Administration			
Funding Opportunity Title:	WaterSMART: Water and Energy Efficiency Grants for FY2010			
Announcement Type:	Funding Opportunity Announcement (FOA)			
Funding Opportunity Number:	R10SF80157			
Catalog of Federal Domestic Assistance (CFDA) Number:	15.507			
Dates: (See FOA Sec. IV.B)	Application due date: May 4, 2010, 4:00 p.m. Mountain Daylight Time			
Eligible Applicants: (See FOA Sec. III.A)	Irrigation and water districts, tribal water or power delivery authorities, State governmental entities with water or power management authority (e.g., State agencies, departments, boards, etc.), and other entities with water or power delivery authority located in the western United States or United States Territories as identified in the Reclamation Act of June 17, 1902, as amended			
Recipient Cost Share: (See FOA Sec. III.E)	50 percent or more of project costs			
Federal Funding Amount: (See FOA Sec. II.B)	Funding Group II: Up to \$300,000 per agreement  Funding Group II: \$300,001 to \$1,000,000 per agreement			
Estimated Number of Agreements to be Awarded: (See FOA Sec. II.B)	Funding Group II: 4 - 8			
Total Amount of Funding Available for Award: (See FOA Sec. II.A)	Funding Group I: Approximately \$9,000,000 to \$10,000,000 Funding Group II: Approximately \$4,000,000 to \$5,000,000			

## **Application Checklist**

The following table contains a summary of the information that you are required to submit

with a WaterSMART Grant application.

<b>√</b>	What to submit	Required content	Form or format	When to submit
	Cover page	See Sec. IV.D.2.a.	Form SF 424, available at: <a href="http://apply07.grants.gov/apply/FormLinks?family=15">http://apply07.grants.gov/apply/FormLinks?family=15</a> > Page 16	*
	Assurances	See Sec. IV.D.2.b.	Form SF 424B or SF 424D, as applicable, available at: <a href="http://apply07.grants.gov/apply/FormLinks?family=15">http://apply07.grants.gov/apply/FormLinks?family=15</a> > Page 16	*
	Title page	See Sec. IV.D.2.c.	Page 16	*
	Table of contents	See Sec. IV.D.2.d.	Page 16	*
	Technical proposal: • Executive	See Sec. IV.D.2.e.	Page 16	*
	Summary	See Sec. IV.D.2.e.(1)	Page 17	*
	<ul><li>Background data</li><li>Technical</li></ul>	See Sec. IV.D.2.e.(2)	Page 17	*
	project description	See Sec. IV.D.2.e.(3)	Pages 17-24	*
	Description of Performance Measures	See Sec. IV.D.2.f	Page 24	*
	Description of potential environmental impacts	See Sec. IV.D.2.g.	Page 24	*
	Required permits and approvals	See Sec. IV.D.2.h.	Page 25	*
	Funding plan	See Sec. IV.D.2.i.	Page 25	*
	Commitment letters	See Sec. IV.D.2.i	Page 25	**
	Official resolution	See Sec. IV.D.2.j.	Page 26	**
	Project budget proposal:  • General	See Sec. IV.D.2.k.	Pages 27-30	*
	requirements • Budget format • Budget	See Sec. IV.D.2.k.(1) See Sec. IV.D.2.k.(2)	Page 27 Page 27	*
	narrative	See Sec. IV.D.2.k.(3)	Page 27	*
	Budget form	See Sec. IV.D.2.k.(4)	Form SF 424A or SF 424C, as applicable, available at: <a href="http://apply07.grants.gov/apply/FormLinks?family=15">http://apply07.grants.gov/apply/FormLinks?family=15</a> > Page 30	*

 <sup>\*</sup> Submit materials with your application on May 4, 2010
 \*\* Documents should be submitted with your application; however, please refer to the applicable Section of the FOA for extended submission dates.

## **Acronyms and Abbreviations**

AOR Authorized Organization Representatives

ARC Application Review Committee CCR Central Contractor Registration

CE Categorical Exclusion

CEC Categorical Exclusion Checklist

DU Distribution Uniformity

DUNS Data Universal Number System
EA Environmental Assessment
E-Biz POC E-Business Point of Contact
EIN Employer Identification Number
EIS Environmental Impact Statement

ESA Endangered Species Act ET Evapo-transpiration

FAQ Frequently Asked Question

FOA Funding Opportunity Announcement FONSI Finding of No Significant Impact

GO Grants Officer

IRS Internal Revenue Service

NEPA National Environmental Policy Act NHPA National Historic Preservation Act

NOAA National Oceanic and Atmospheric Administration

O&M Operation and maintenance

OMB Office of Management and Budget

OM&R Operations, Maintenance, and Replacement SCADA Supervisory Control and Data Acquisition

SOR System Optimization Review
TIN Taxpayer Identification Number
USFWS U.S. Fish and Wildlife Service

WaterSMART Sustain and Manage America's Resources for Tomorrow

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## Section I—Funding Opportunity Description

#### A. WaterSMART: Water and Energy Efficiency Grants

The Nation faces an increasing set of water resource challenges. Aging infrastructure, rapid population growth, depletion of groundwater resources, impaired water quality associated with particular land uses and land covers, water needed for human and environmental uses, and climate variability and change all play a role in determining the amount of fresh water available at any given place and time. Water shortage and water-use conflicts have become more commonplace in many areas of the United States, even in normal water years. As competition for water resources grows—for irrigation of crops, growing cities and communities, energy production, and the environment—the need for information and tools to aid water resource managers also grows. Water issues and challenges are increasing across the Nation, but particularly in the West due to prolonged drought.

These water issues are exacerbating the challenges facing traditional water management approaches which by themselves no longer meet today's needs. The Department's WaterSMART (Sustain and Manage America's Resources for Tomorrow) program is working to achieve a sustainable water strategy to meet the Nation's water needs. Through WaterSMART Grants, Reclamation provides cost-shared funding on a competitive basis for on-the-ground water conservation and energy efficiency construction projects.

For further information on the WaterSMART Program, see <a href="http://www.usbr.gov/WaterSMART/">http://www.usbr.gov/WaterSMART/</a>>.

#### **B.** Objective of Funding Opportunity Announcement

The objective of this Funding Opportunity Announcement (FOA) is to invite States, Indian Tribes, irrigation districts, water districts and other organizations with water or power delivery authority to leverage their money and resources by cost sharing with Reclamation on projects that save water, improve energy efficiency, address endangered species and other environmental issues, and facilitate transfers to new uses.

Water conservation, use of water markets, and improved efficiency are crucial elements of any plan to address western U.S. water issues. With leveraged water sustainability grants, an important step will be taken towards increasing conservation for a more efficient use of water in the West.

#### C. Program Authority

This FOA is issued under the authority of Section 9504 of the Secure Water Act, Subtitle F of Title IX of the Omnibus Public Land Management Act of 2009, P.L. 111-11(42 USC 10364).

#### **D. Frequently Asked Questions**

A list of Frequently Asked Questions (FAQs) about WaterSMART and this FOA can be found on-line at <a href="http://www.usbr.gov/WaterSMART">http://www.usbr.gov/WaterSMART</a>. The list of FAQs will be updated periodically during the application period.

#### Section II—Award Information

#### A. Total Project Funding

It is expected that up to a total of \$14,000,000 will be available for project awards under this FOA. This year, Reclamation plans to award projects in two Funding Groups, as described immediately below.

#### **B. Project Funding Limitations**

Funding will be awarded in two groups:

<u>Funding Group I</u>: Between \$9,000,000 and \$10,000,000 in Federal funds will be available for awards up to \$300,000 per project. Estimated number of agreements to be awarded: 30-40.

<u>Funding Group II</u>: Between \$4,000,000 and \$5,000,000 in Federal funds will be available for awards between \$300,001 to \$1,000,000 per project. Estimated number of agreements to be awarded: 4-8.

Reclamation's share of any one proposed project shall not exceed 50 percent of the total project costs.

Multiple applications for funding may be submitted for consideration. *However*, no more than \$1,000,000 in Federal funds will be awarded to any one applicant under this FOA.

#### C. Reclamation Responsibilities

Project awards will be made through grants or cooperative agreements as applicable to each project. If a cooperative agreement is awarded, the recipient should expect Reclamation to have substantial involvement in the project. Substantial involvement by Reclamation will include:

- Collaboration and participation with the recipient in the management of the project and close oversight of the recipient's activities to ensure that the program objectives are being achieved.
- Oversight may include review, input, and approval at key interim stages of the project.

At the request of the recipient, Reclamation can provide technical assistance after award of the project. If you receive Reclamation's assistance, you must account

for these costs in your budget. To discuss assistance available and these costs, contact your local Reclamation office, which can be identified at <a href="http://www.usbr.gov/main/regions.html">http://www.usbr.gov/main/regions.html</a>>.

#### **D. Award Date**

It is expected that the names of potential award recipients will be announced in late June, 2010. Within one to three months after the initial announcement, assistance agreements will be awarded to applicants that successfully pass all pre-award reviews and clearances.

### **Section III—Eligibility Information**

#### A. Eligible Applicants

In accordance with P.L. 111-11, Section 9502, eligible applicants include:

- State or Territory agencies or departments with water or power delivery authority, e.g., State departments of water resources, State engineer's offices, and other State or Territory agencies, departments, and boards with water management authority.
- Federally recognized Indian tribes with water or power delivery authority. The term "Indian tribe" has the meaning given in Section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b).
- Irrigation and water districts.
- Entities created under State or Territorial law with water management authority, which may include water user associations; water conservancy districts; and canal, ditch, and reservoir companies.
- Municipal water or power delivery authorities.
- Other organizations with water or power delivery authority.

Applicants must also be located in the western U.S. or Territories as identified in the Reclamation Act of June 17, 1902, as amended and supplemented; specifically, Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, Wyoming, American Samoa, Guam, the Northern Mariana Islands, and the Virgin Islands.

**Those not eligible** include entities without water or power delivery authority, such as:

- Other State governmental entities
- Federal governmental entities
- Institutions of higher education
- Individuals

#### **B. Eligible Projects**

All projects must be completed by September 30, 2012. Projects should seek to conserve and use water more efficiently, increase the use of renewable energy, protect endangered and threatened species, facilitate water markets, or carry out other activities to address climate-related impacts on water or prevent any water-related crisis or conflict.

Tasks A-D, below, describe projects eligible for funding under this FOA. Applications may include any one, or a combination, of the types of projects described in Tasks A-D. In general, if you are seeking funding for multiple projects (for example, a Task A project and a Task C project) and the projects are interrelated or closely related, they should be combined in one application. Conversely, if the projects can be completed independently and are easily separated or phased, they may be applied for separately.

Applicants may submit multiple project proposals; however, no more than \$1,000,000 will be awarded to any one applicant under this FOA. Other projects that are similar to those listed below may be submitted for consideration and will be allowed to the extent consistent with program authorization and goals.

**Task A–Water Conservation:** Projects that result in quantifiable and sustained water savings or improve water management.

- **1. Canal Lining and Piping**: Projects that line or pipe canals resulting in conserved water. Projects include but are not limited to:
  - Installing new proven lining materials or technology
  - Converting open canals to pipeline
- **2. Improved Water Management**: Projects that retrofit or modernize existing facilities to improve water management through the use of technology. Projects include but are not limited to:
  - Automation of canal gates or other control structures with associated telemetry equipment for offsite control.
  - Installation of Supervisory Control and Data Acquisition (SCADA) programs to remotely monitor and operate key river and canal facilities.
  - Installation of evapo-transpiration (ET) controllers to improve water applications.

- Installation of advanced water measurement equipment, such as acoustic meters, magnetic meters, propeller meters, and weirs or flumes with reliable continuous totalizing sensors and recorders.
- Construction of facilities to allow or increase aquifer recharge.

**Task B – Energy Efficiency:** Projects that increase the use of renewable energy sources in the management and delivery of water as well as projects that upgrade existing water management facilities resulting in quantifiable and sustained energy savings. Projects include but are not limited to:

## (a) Implementation of Renewable Energy Improvements Related to Water Management and Delivery

- Installation of small-scale hydroelectric, solar-electric, wind energy, or geothermal power systems, or other facilities that enable use of these or other renewable energy sources (e.g., replacing fossil fuel powered pumps with renewable energy based pumps or installing low-head hydrokinetic power generation units in a water system, etc.)
- Production and use of biomass or renewable fuels that include woody and herbaceous crops and residues, solid waste, sewage, and liquid fuels from agricultural products (e.g., developing or using technology that would transform algae into a renewable oil source)

#### (b) Increasing Energy Efficiency in Water Management

- Retrofit or modernization of water management facilities or equipment to increase energy efficiency (e.g., installing Variable Frequency Drives, Advanced Meter Readings, or "smart grid" technology on pump and water systems)
- Quantifiable reductions in energy consumption through water conservation projects that reduce pumping or diversions

**Task C – Addressing Endangered Species Concerns:** Projects that benefit federally listed species (threatened or endangered) or designated critical habitat affected by a Reclamation facility or action as well as projects that benefit federally recognized candidate species. Projects include but are not limited to:

- Habitat improvements, including habitat restoration, making additional water available, and vegetation management.
- Installation of fish bypasses and fish screens, and hatchery improvements.

**Task D – Water Banks and Water Markets:** Projects that implement or use water markets and water banks to make water available to meet other existing water supply needs or uses (e.g., agricultural, municipal, or dedication to instream flows). Projects include but are not limited to:

- Development of a water bank that would provide a mechanism for willing participants to buy, sell, lease, or exchange water to avoid or reduce water conflicts
- Projects that would result in the contribution of conserved water to an existing water market or bank
- Projects involving an individual sale, lease, or exchange of conserved water to another water user for agricultural, municipal, or instream uses

#### C. Ineligible Projects

Projects that are considered normal Operations, Maintenance, and Replacement (OM&R) are not eligible. OM&R is described as system improvements that replace or repair existing infrastructure or function without providing increased efficiency or effectiveness of water distribution over the expected life of the improvement.

Examples of ineligible OM&R projects include:

- Replacing malfunctioning components of an existing facility with the same components
- Improving an existing facility to operate as originally designed
- Performing an activity on a recurring basis even if that period is extended (e.g., 10-year interval)
- Sealing expansion joints of concrete lining because the original sealer or the water stops have failed
- Replacing broken meters with new meters of the same type
- Replacing leaky pipes

#### D. Length of Projects

Proposed projects should be completed within 24 months from the project start date. Applications for projects requiring more than 2 years will be considered if you can demonstrate that there will be measureable on-the-ground accomplishments each year.

#### **E. Cost-Sharing Requirement**

Applicants must be willing to cost share 50 percent or more of the total project costs. Cost sharing may be made through cash or in-kind contributions from the applicant or third-party partners. Cost share funding from sources outside the applicant's organization, e.g., loans or state grants, is to be secured and available to the applicant by no later than September 1, 2010. Funding commitment letters must be submitted in accordance with Section IV.C. below, and contain the information stated at Section IV.D.2.i. Applicant cost sharing in excess of 50 percent will be more favorably ranked during the selection process.

#### 1. Regulations

All cost-share contributions must meet the criteria established in the Office of Management and Budget's (OMB) administrative and cost principles circulars that apply to the applicant. These circulars are available at <a href="http://www.whitehouse.gov/omb/circulars/">http://www.whitehouse.gov/omb/circulars/</a>>.

• STATE, LOCAL, AND TRIBAL GOVERNMENTS that are recipients or subrecipients shall use:

Circular A-87, revised May 10, 2004, "Cost Principles for State, Local, and Indian Tribal Governments"

Circular A-102, as amended August 29, 1997, "Grants and Cooperative Agreements with State and Local Governments" (Grants Management Common Rule, Codification by Department of Interior, 43 CFR 12, Subpart C)

Circular A-133, revised June 27, 2003, "Audits of States, Local Governments, and Non-Profit Organizations"

• **NONPROFIT ORGANIZATIONS** that are recipients or subrecipients shall use:

Circular A-110, as amended September 30, 1999, "Uniform Administrative Requirements for Grants and Agreements With Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations" (Codification by Department of Interior, 43 CFR 12, Subpart F)

Circular A-122, revised May 10, 2004, "Cost Principles for Non-Profit Organizations"

Circular A-133, revised June 27, 2003, "Audits of States, Local Governments, and Non-Profit Organizations"

• ORGANIZATIONS OTHER THAN THOSE INDICATED ABOVE that are recipients or subrecipients shall use the basic principles of OMB Circular A-110 (Codification by Department of Interior, 43 CFR 12, Subpart F), and cost principles shall be in accordance with 48 CFR Subpart 31.2, titled "Contracts with Commercial Organizations," which is available at <a href="http://www.gpoaccess.gov/ecfr/">http://www.gpoaccess.gov/ecfr/></a>

Additionally, please reference 43 CFR 12.77 for further regulations that cover the award and administration of subawards by State governments.

#### 2. In-Kind Contributions

In-kind contributions constitute the value of noncash contributions that benefit a federally assisted project. These contributions may be in the form of real property, equipment, supplies and other expendable property, as well as the value of goods and services directly benefiting and specifically identifiable to the project or program. The cost or value of in-kind contributions that have been or will be relied on to satisfy a cost-sharing or matching requirement for another Federal financial assistance agreement, a Federal procurement contract, or any other award of Federal funds may not be relied on to satisfy the cost-share requirement for WaterSMART Grant applications.

#### 3. Pre-Award Costs

Project pre-award costs that have been incurred prior to the date of award but after the date of authorization and appropriation for this Program may be submitted for consideration as an allowable portion of the recipient's cost share for the project. In no case will pre-award costs incurred prior to October 28, 2009, be considered for cost share purposes.

For example, such costs might include design or construction plans and environmental compliance costs directly supporting the proposed project. Reclamation will review the proposed pre-award costs to determine if they are allowable in accordance with the authorizing legislation and applicable cost principles. To be considered allowable, any pre-award costs proposed for consideration under the new awards must comply with all applicable requirements under this FOA.

#### 4. Indirect Costs

Indirect costs that will be incurred during the development or construction of a project, which will not otherwise be recovered, may be included as part of the applicant's cost share. Indirect costs are those: (1) incurred for a common or joint purpose benefiting more than one cost objective, and (2) not readily assignable to any one cost objective. For further information on indirect costs, refer to the applicable OMB cost principles circular referenced above.

## F. Requirements for Agricultural Operations [Public Law 111-11, Section 9504(a)(3)(B)]

In accordance with Section 9504(a)(3)(B) of Public Law 111-11, grants and cooperative agreements under this authority will not be awarded for an improvement to conserve irrigation water unless the applicant agrees not—

- To use any associated water savings to increase the total irrigated acreage of the eligible applicant or
- To otherwise increase the consumptive use of water in the operation of the eligible applicant, as determined pursuant to the law of the State in which the operation of the eligible applicant is located

#### G. Other Requirements

Applicants shall adhere to Federal, State, Territorial, and local laws, regulations, and codes, as applicable, and shall obtain all required approvals and permits. Applicants shall also coordinate and obtain approvals from site owners and operators.

#### 1. Title to Improvements [Public Law 111-11, Section 9504(a)(3)(D)]

If the activities funded through an agreement awarded under this FOA result in an infrastructure improvement to a federally owned facility, the Federal Government shall continue to hold title to the facility and improvements to the facility.

## 2. Operation and Maintenance Costs [Public Law 111-11, Section 9504(a)(3)(E)(iv)]

The non-Federal share of the cost of operating and maintaining any infrastructure improvement funded through an agreement awarded under this FOA shall be 100 percent.

#### 3. Liability [Public Law 111-11, Section 9504(a)(3)(F)]

(a) In General—Except as provided under chapter 171 of title 28, United States Code (commonly known as the "Federal Tort Claims Act"), the United States shall not be liable for monetary damages of any kind for any

injury arising out of an act, omission, or occurrence that arises in relation to any facility created or improved through an agreement awarded under this FOA, the title of which is not held by the United States.

**(b) Tort Claims Act**—Nothing in this section increases the liability of the United States beyond that provided in chapter 171 of title 28, United States Code (commonly known as the "Federal Tort Claims Act").

## Section IV—Application and Submission Information

#### A. Address to Request Application Package

This document contains all information, forms, and electronic addresses required to obtain the information required for submission of an application.

If you are unable to access this information electronically, you can request paper copies of any of the documents referenced in this FOA by contacting:

By mail: Bureau of Reclamation

Acquisition Operations Group Attn: Stephanie Bartlett Mail Code: 84-27810 P.O. Box 25007 Denver CO 80225

E-mail: sbartlett@usbr.gov

Phone: 303-445-2025

#### **B. Application Submission Date and Time**

Application submission date deadline:

• May 4, 2010, 4:00 p.m. Mountain Daylight Time

Proposals received after the application deadline will not be considered unless it can be determined that the delay was caused by Federal government mishandling or by the Grants.gov application system.

#### C. Application Delivery Instructions

Applications may be submitted electronically through < <a href="http://www.grants.gov">http://www.grants.gov</a> or hard copies may be submitted as follows:

#### By mail:

Bureau of Reclamation Acquisition Operations Group Attn: Stephanie Bartlett Mail Code: 84-27810 P.O. Box 25007 Denver CO 80225

#### Express delivery/mail services:

Bureau of Reclamation Attn: Stephanie Bartlett, Mail Code: 84-27810 Denver Federal Center, Bldg. 67 Rm. 152 6<sup>th</sup> Avenue and Kipling Street Denver CO 80225

Telephone: 303-445-2025

#### D. Instructions for Submission of Project Application

Each applicant shall submit an application in accordance with the instructions contained in this section.

- Applicants shall submit an original and one copy of all application documents for hardcopy submissions. Each document should be clearly identified as the "ORIGINAL" or as a "COPY."
- Please do not use "comb," "spiral," or adhesive methods to bind the documents.
- Hard copy applications may be submitted by mail or express methods to the addresses listed in Section IV.C, above.
- Materials arriving separately will not be included in the application package and may result in the application being rejected or not funded.
- Faxed copies of application documents will not be accepted.
- Do not include a cover letter or company literature/brochure with the application. All pertinent information must be included in the application package.
- Electronic applications must be submitted through Grants.gov at <a href="http://www.grants.gov">http://www.grants.gov</a>>.

- Please note that submission of an application electronically requires prior registration through Grants.gov, which may take 7-21 days. See Section VIII.D for further information on submission of applications through Grants.gov.
- O Applicants have sometimes experienced significant delays when attempting to submit applications through Grants.gov. If you plan to submit your application through Grants.gov, you are encouraged to submit your application several days prior to the application deadline. If you are a properly registered Grants.gov applicant and encounter problems with the Grants.gov application submission process, you must contact the Grants.gov Help desk to obtain a "Case Number." This Number will provide evidence of your attempt to submit an application prior to the submission deadline.
- Regardless of the delivery method used, you must ensure that your
  proposal arrives by the date and time deadline stated in Section IV.B.,
  above. Late applications will not be accepted unless it is determined that
  the delay was caused by Federal government mishandling or by a problem
  with the Grants.gov application system.

#### 1. Application Format and Length

The total application package shall be no more than **100 consecutively numbered** pages and shall be single spaced and printed single-sided. If an application exceeds 100 pages, only the first 100 pages will be evaluated. The font shall be at least 12 points in size and easily readable. Page size shall be 8 ½" x 11," except for an occasional larger size for charts, maps, or drawings. The Technical Proposal section shall be limited to a maximum of **30** (thirty) pages.

Applications will be prescreened for compliance to the page number limitations.

#### 2. Application Content

The application must include the following elements in order to be considered complete:

- SF-424 Core Form Application cover page
- SF-424 B or D Form, as applicable to the project
- Title page
- Table of contents
- Technical proposal (limited to 30 pages)
  - o Executive summary
  - o Background data
  - Technical project description
- Post-project benefits (performance measures)

- Potential environmental impacts
- Required permits and approvals
- Funding plan and letters of commitment
- Letters of project support (do not submit separately)
- Official resolution
- Project budget application
  - o Budget proposal
  - o Budget Narrative
  - o SF-424 A or C Form, as applicable to the project

SF-424, SF-424A, SF-424B, SF-424C and SF-424D forms may be obtained at <a href="http://apply07.grants.gov/apply/FormLinks?family=15">http://apply07.grants.gov/apply/FormLinks?family=15</a> >.

#### a. SF-424 Application Cover Page

This fully completed form must be signed by a person legally authorized to commit the applicant to performance of the project. Failure to submit a properly signed SF-424 may result in the elimination of the application from further consideration.

#### b. SF-424 Assurances

A SF-424B – Assurances – Non-Construction Programs or an SF-424D – Assurances – Construction Programs, signed by a person legally authorized to commit the applicant to performance of the project shall be included. Questions regarding whether to use SF-424B or SF-424D should be referred to Stephanie Bartlett at: sbartlett@usbr.gov. Failure to submit a properly signed SF-424B or SF-424D may result in the elimination of the application from further consideration.

#### c. Title Page

Provide a brief, informative, and descriptive title for the proposed work that indicates the nature of the project. Include the name and address of the applicant, and the name and address, e-mail address, telephone, and facsimile numbers of the project manager.

#### d. Table of Contents

List all major sections of the technical proposal in the table of contents.

#### e. Technical Proposal and Evaluation Criteria

The technical proposal (30 pages maximum) includes: (1) the Executive Summary, (2) Background Data, and (3) Technical Project Description. To ensure accurate and complete scoring of your application, your proposal should address each subcriterion in the order presented here. Where applicable, the point value is indicated.

- (1) **Technical Proposal: Executive Summary.** The executive summary should include:
  - The date, applicant name, city, county, and state.
  - A one-paragraph project summary that specifies the Task Area (A, B, C, or D) and briefly identifies how the proposed project contributes to accomplishing the goals of this task area (see Section III.B, "Eligible Projects").
  - List the following amounts, in acre feet:
    - o The average annual acre-feet of water supply
    - o The estimated amount of water saved after the project is completed
    - o The estimated amount of water better managed
    - o The estimated and current amount of water marketed
  - State the length of time and estimated completion date for the project.
- (2) Technical Proposal: Background Data. Provide a map of the area showing the geographic location (State, county, and direction from nearest town). Describe the source of water supply, the water rights involved, current water uses (agricultural, municipal, domestic, or industrial), the number of water users served, and the current and projected water demand. Also, identify potential shortfalls in water supply. If water is primarily used for irrigation, describe major crops and total acres served. If the application includes renewable energy or energy efficiency elements, describe existing energy sources and current energy uses.

In addition, describe the applicant's water delivery system. For agricultural systems, please include the miles of canals, miles of laterals, and existing irrigation improvements (i.e., type, miles, and acres). For municipal systems, please include the number of connections and/or number of water users served and any other relevant information describing the system.

If applicable, describe any Endangered Species Act (ESA) issues that exist in the geographic area.

Identify any past working relationships with Reclamation. This should include the date(s), description of prior relationships with Reclamation, and a description of the projects(s).

(3) **Technical Proposal: Technical Project Description.** The technical project description should describe the work in detail and the approach to be used to carry it out. Break the work out into major tasks. This description shall have sufficient detail to permit a comprehensive evaluation of the proposal. The technical project description should also include:

- An estimated project schedule that shows the stages and duration of the proposed work, including major milestones and dates
- Engineering plans, designs, and analyses prepared in connection with the proposed work
- Mechanism by which the project will conserve water, improve delivery efficiency, and/or develop water banks and water markets
- Explanation of the ways that the project will improve sustainable water supplies and demonstrate results, such calculations of project benefits
- Identification of sources and support for non-Federal funding.
- (4) **Technical Proposal: Evaluation Criteria.** The Technical Proposal portion of your application should thoroughly address each of the following criteria and subcriteria in the order presented to assist in the complete and accurate evaluation of your proposal.
  - (a) <u>Water Conservation</u> (32 points). Up to 32 points may be awarded for a proposal that will conserve water and improve efficiency. Points will be allocated to give consideration to projects that are expected to result in significant water savings.

#### Subcriteria No. 1—Quantifiable Water Savings:

Up to 15 points may be allocated based on the quantifiable water savings expected as a result of the project.

**Describe the amount of water saved.** For projects that conserve water, state the estimated amount of water conserved in acre-feet per year (include direct water savings only).

#### Subcriteria No. 2—Percentage of Total Supply:

Up to 8 additional points may be allocated based on the percentage of the applicant's total average water supply that will be conserved directly as a result of the project.

**Describe the improvement to the applicant's overall delivery efficiency, including the following**: State the applicant's total average annual water supply in acre-feet. (This is the amount actually diverted, pumped, or released from storage, on average, each year. This does not refer to the applicant's total water right or potential water supply.) Explain how this calculation was made. State the existing transport losses and delivery efficiency.

#### Subcriteria No. 3—Improved Water Management:

Up to **5 points** may be awarded if the proposal will improve water management through measurement, automation, advanced water measurement systems, or through other approaches where water savings are not quantifiable.

For projects that improve water management but which may not result in measurable water savings, state the amount of water expected to be better managed, in acre-feet per year and as a percentage of the average annual water supply.

#### Subcriteria No. 4—Reasonableness of Costs:

Up to **4 additional points** may be awarded for the reasonableness of the cost for the benefits gained. Please include information related to the total project cost, annual acre-feet conserved (or better managed), and the expected life of the improvement. Use the following calculation

Total Project Cost

Acre-Feet Conserved (or better managed) x Improvement Life

Failure to include this required calculation will result in no score for this section.

For all projects involving physical improvements, **specify the expected life of the improvement in number of years.** 

(b) <u>Energy Efficiency</u> (16 points). Up to 16 points may be awarded based on the extent to which the project increases the use of renewable energy or otherwise results in energy conservation in the management and delivery of water.

Subcriteria No. 1—Implementation of Renewable Energy Projects Up to 12 points may be awarded for projects that include construction or installation of renewable energy components (i.e., small-scale hydroelectric units, solar-electric facilities, wind energy systems, or facilities that otherwise enable the use of renewable energy). Projects such as small scale solar resulting in minimal energy savings or production will be considered under Subcriteria No. 2 below.

Points may be awarded based on the applicant's readiness to proceed, including the completion of all necessary permits and power purchase agreements; the extent to which the applicant plans to create renewable energy projects in rural areas and/or serve Native American tribes; and/or the extent to which the project is expected to produce quantifiable benefits to a community or to make energy available to groups other than the project applicant.

For projects that include construction of renewable energy facilities, please describe the renewable energy system, including the following elements:

- (1) Role of the renewable energy system in the operations of the applicant
- (2) Discussion of the applicant's readiness to proceed, including discussion of any necessary permits
- (3) Expected infrastructure improvements to the applicant's operation
- (4) Estimated quantity of energy to be generated by the renewable energy system
- (5) Percentage of total energy supply that is expected to be renewable as a result of the project
- (6) Expected environmental benefits of the renewable energy system
- (7) Quantity of energy savings to be derived from the activity, as demonstrated by an energy audit
- (8) Expected energy efficiency of the renewable energy system
- (9) Any expected reduction in the use of energy currently supplied through a Reclamation project
- (10) Anticipated beneficiaries of the renewable energy system

## Subcriteria No. 2—Increasing Energy Efficiency from Enhanced Water Management or Water Conservation

Up to **4 points** may be awarded for projects that address energy demands by retrofitting equipment to increase energy efficiency or through water conservation improvements that result in reduced pumping or diversions (e.g. installing solar as part of a SCADA system).

Please describe any energy efficiency improvements that are expected to result from implementation of the project. Include support for the calculation of any energy savings expected to result from water conservation improvements.

(c) <u>Addressing Endangered Species Concerns</u> (12 points). Up to 12 points may be awarded for projects expected to benefit federally-listed threatened or endangered species or federally-recognized candidate species.

For projects that will accelerate the recovery of threatened species or endangered species or address designated critical habitats, please include the following elements:

- (1) Relationship of the species to a Reclamation project water supply
- (2) Likely impacts that would result from an interruption in the water supply
- (3) Extent to which the proposed project would reduce the likelihood of listing or would otherwise improve the status of the species

For projects that will benefit federally-recognized candidate species, please include the following elements:

- (1) Relationship of the species to water supply
- (2) Likely impacts that would result from an interruption in the water supply
- (3) Extent to which the proposed project would reduce the likelihood of listing or would otherwise improve the status of the species

Projects that benefit both federally-listed endangered species and federally-recognized candidate species will receive additional consideration under this criterion.

- (d) <u>Other Contributions to Water Supply Sustainability</u> (12 points). Up to 12 points may be awarded for projects that contribute to a more sustainable water supply in ways not covered by other criteria (e.g., addressing specific local concerns, water supply shortages due to climate variability, significant population growth, or drought).
  - (1) Will the project make water available to address a specific concern, e.g. water supply shortages due to climate variability and/or heightened competition for finite water supplies; will it market water to other users, or generally make more water available in the water basin where the proposed work is located?
  - (2) Where will the conserved water go? Where is that water currently going (i.e., back to the stream, spilled at the end of the ditch, seeping into the ground, etc.)?

- (3) Does the project promote and encourage collaboration among parties? Is there widespread support for the project? Will the project help to prevent a water-related crisis or conflict?
- (e) <u>Water Marketing and Banking</u> (10 points). Up to 10 points may be awarded for projects that propose water marketing elements, with maximum points for projects that establish a new water market or bank.

Briefly describe any water marketing or banking elements included in the proposed project. Include the following elements:

- (1) Estimated amount of water to be marketed/banked
- (2) A detailed description of the mechanism through which water will be marketed (e.g., individual sale, contribution to an existing market/bank, the creation of a new water market/bank, or construction of a recharge facility)
- (3) Number of users, types of water use, etc. in the water market/bank
- (4) A description of any legal issues pertaining to water marketing or banking (e.g., restrictions under reclamation law or contracts, individual project authorities, or State water laws)
- (5) Estimated duration of the water transfer or market
- (f) <u>Demonstrated Results</u> (8 points). Up to 8 points may be awarded for proposals that can demonstrate results based on the level of planning supporting the project. Up to 3 of these points may be awarded for proposals with planning efforts that provide support for the proposed project.

Does the project have a Water Conservation Plan, System Optimization Review (SOR), and/or district or geographic area drought contingency plans in place? Please self-certify, or provide copies, where appropriate to verify there is a water conservation plan, SOR, and/or district or geographic area drought contingency plans in place.

#### Provide the following information regarding project planning:

(1) Identify any district-wide, or system-wide, planning that provides support for the proposed project. This could include a Water Conservation Plan, SOR, or other planning efforts done to determine the priority of this project in relation to other potential projects.

- (2) Identify and describe any engineering or design work performed specifically in support of the proposed project.
- (3) Describe how the project conforms to and meets the goals of any applicable State or regional water plans, and identify any aspect of the project that implements a feature of an existing water plan(s).

Up to **3 additional points** may be awarded to proposals that provide support for the development of performance measures to quantify actual project benefits upon completion of the project.

Provide a brief summary describing the performance measure that will be used to quantify actual benefits upon completion of the project (i.e., water saved, marketed, or better managed, or energy saved). For more information calculating performance measure, see Section VIII, "Other Information."

Up to 2 additional points may be awarded to proposals which provide support for how estimates of the benefits were made (i.e., calculations, measurements, and references).

Summarize the information regarding how direct and indirect project benefits were calculated, and reference any supporting documents.

(g) <u>Project Financing and Cost Sharing</u> (6 points). Up to 6 points will be awarded for proposals based on the extent to which costs are reasonable for the work proposed and the extent to which the non-Federal cost-share exceeds minimum requirements.

#### **Subcriteria No. 1—Allocation of Costs:**

Up to **4 points** may be awarded for proposed projects for which the costs are reasonable, appropriate for the work proposed, necessary, and predominantly allocated to direct costs.

Does the budget identify direct, indirect, environmental, and contingency costs? If not, explain.

#### Subcriteria No. 2—Additional non-Federal Funding:

Up to **2** additional points may be awarded to proposals that provide non-Federal funding in excess of 50 percent of the project costs.

State the percentage of non-Federal funding provided.

(h) <u>Connection to Reclamation Project Activities</u> (4 points). Up to 4 points may be awarded if the proposed project is in a basin with connections to Reclamation project activities. No points will be awarded for proposals without connection to a Reclamation project or Reclamation activity.

How is the proposed project connected to Reclamation project activities?

Does the applicant receive Reclamation project water?

Is the project on Reclamation project lands or involving Reclamation facilities?

Is the project in the same basin as a Reclamation project or activity?

Will the proposed work contribute water to a basin where a Reclamation project is located?

#### f. Performance Measure for Quantifying Actual Postproject Benefits

All proposals must describe how you will quantify actual project benefits (water saved, marketed or better managed) upon completion of the project (also known as a "performance measure"). You should identify a performance measure for their project and explain how the measure will be applied to their project.

Upon completion of the project, WaterSMART Grant recipients will be required to submit a Final Report describing the completed project and quantifying the actual project benefits. If information regarding project benefits is not available immediately upon completion of the project, the financial assistance agreement may be modified to remain open until such information is available, and until a Final Report is submitted.

#### g. Description of Potential Environmental Impacts

In order to allow Reclamation to assess the probable environmental impacts and costs associated with each application, all applicants must respond to the following list of questions focusing on the requirements of the National Environmental Policy Act (NEPA), the ESA, and the National Historic Preservation Act (NHPA). Please answer the following questions to the best of your knowledge. If any question is not applicable to the project, please explain why. Additional information about environmental compliance is provided in this section at paragraph k(3)(g), "Environmental and Regulatory Compliance Cost" and in Section VIII B., "Environmental Compliance Requirements." If you have any questions, please contact your regional or area Reclamation office (see <a href="http://www.usbr.gov/main/regions.html">http://www.usbr.gov/main/regions.html</a>) with questions regarding ESA compliance issues or you may contact Dean Marrone, WaterSMART Program Coordinator, at 303-445-3577 for further information.

(1) Will the project impact the surrounding environment (i.e., soil [dust], air, water [quality and quantity], animal habitat, etc.)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.

- (2) Are you aware of any endangered or threatened species in the project area? If so, would they be affected by any activities associated with the proposed project?
- (3) Are there wetlands inside the project boundaries? If so, please estimate how many acres of wetlands there are and describe any impact the project will have on the wetlands.
- (4) When was the water delivery system constructed?
- (5) Will the project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.
- (6) Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.
- (7) Are there any known archeological sites in the proposed project area?

#### h. Required Permits or Approvals

Applicants must state in the application whether any permits or approvals are required and explain the plan for obtaining such permits or approvals.

#### i. Funding Plan and Letters of Commitment

Describe how the non-Reclamation share of project costs will be obtained. Reclamation will use this information in making a determination of financial capability.

Project funding provided by a source other than the applicant shall be supported with letters of commitment from these additional sources. This is a **mandatory requirement**. Letters of commitment shall identify the following elements:

- (1) The amount of funding commitment
- (2) The date the funds will be available to the applicant
- (3) Any time constraints on the availability of funds
- (4) Any other contingencies associated with the funding commitment

Commitment letters should be included with your project application. If a final funding commitment has not been received by the date of application,

commitment letters are to be submitted by no later than September 1, 2010, to the address shown in Section IV.C, above.

The funding plan must include all project costs, as follows:

- (1) How you will make your contribution to the cost-share requirement, e.g., monetary and/or in-kind contributions and source funds contributed by the applicant (e.g., reserve account, tax revenue, and/or assessments).
- (2) Describe any in-kind costs incurred before the anticipated project start date that you seek to include as project costs. The description of these costs shall include
  - (a) What project expenses have been incurred
  - (b) How they benefitted the project
  - (c) The amount of the expense
  - (d) The date of cost incurrence
- (1) Provide the identity and amount of funding to be provided by funding partners, as well as the required letters of commitment.
- (2) Describe any funding requested or received from other Federal partners. **Note:** Other sources of Federal funding may not be counted towards the applicant's 50 percent cost share unless otherwise allowed by statute.
- (3) Describe any pending funding requests that have not yet been approved, and explain how the project will be affected if such funding is denied.

#### j. Official Resolution

Include an official resolution adopted by the applicant's board of directors or governing body, or for state government entities, an official authorized to commit the applicant to the financial and legal obligations associated with receipt of WaterSMART Grant financial assistance, verifying:

- The identity of the official with legal authority to enter into agreement
- The board of directors, governing body, or appropriate official who has reviewed and supports the application submitted

- The capability of the applicant to provide the amount of funding and/or in-kind contributions specified in the funding plan
- That the applicant will work with Reclamation to meet established deadlines for entering into a cooperative agreement

An official resolution meeting the requirements set forth above is mandatory. If the applicant is unable to submit the official resolution by the application deadline because of the timing of board meetings or other justifiable reasons, the official resolution may be submitted up to 30 days after the application deadline.

#### k. Budget Proposal

- (1) General Requirements. Include a project budget with the annual estimated project costs and an estimate of any increase or decrease in operation and maintenance (O&M) costs resulting from the project. Include the value of in-kind contributions of goods and services and sources of funds provided to complete the project. The proposal must clearly delineate between Reclamation and applicant contributions.
- (2) **Budget Proposal Format.** The project budget shall include detailed information on the categories listed below and must clearly identify all project costs and the funding source(s) (i.e., Reclamation or other funding sources). Unit costs shall be provided for all budget items including the cost of work to be provided by contractors. **Lump sum costs are not acceptable.** Additionally, applicants shall include a narrative description of the items included in the project budget. It is strongly advised that applicants use the budget format shown on table 1 at the end of this section or a similar format that provides this information.
- (3) **Budget Narrative Format.** Submission of a budget narrative is mandatory. An award will not be made to any applicant who fails to fully disclose this information. The Budget Narrative provides a discussion of, or explanation for, items included in the budget proposal. Listed below are examples of the types of information to include in the narrative.
  - (a) Salaries and Wages. Indicate program manager and other key personnel by name and title. Other personnel may be indicated by title alone. For all positions, indicate salaries and wages, estimated hours or percent of time, and rate of compensation proposed. All labor estimates, including any proposed subcontractors, shall be allocated to specific tasks as outlined in the recipient's technical project description. Labor rates and proposed hours shall be displayed for each task.

Clearly identify any proposed salary increases and the effective date.

Generally, salaries of administrative and/or clerical personnel should be included as a portion of the stated indirect costs. If these salaries can be adequately documented as direct costs, they may be included in this section; however, a justification should be included in the budget narrative.

- (b) Fringe Benefits. Indicate rates/amounts, what costs are included in this category, and the basis of the rate computations. Indicate whether these rates are used for application purposes only or whether they are fixed or provisional rates for billing purposes. Federally approved rate agreements are acceptable for compliance with this item.
- (c) Travel. Include purpose of trip, destination, number of persons traveling, length of stay, and all travel costs including airfare (basis for rate used), per diem, lodging, and miscellaneous travel expenses. For local travel, include mileage and rate of compensation.
- (d) Equipment. Itemize costs of all equipment having a value of over \$500 and include information as to the need for this equipment. If equipment is being rented, specify the number of hours and the hourly rate.
- (e) Materials and Supplies. Itemize supplies by major category, unit price, quantity, and purpose, such as whether the items are needed for office use, research, or construction.
- (f) Contractual. Identify all work that will be accomplished by subrecipients, consultants, or contractors, including a breakdown of all tasks to be completed, and a detailed budget estimate of time, rates, supplies, and materials that will be required for each task. If a subrecipient, consultant, or contractor is proposed and approved at time of award, no other approvals will be required. Any changes or additions will require a request for approval.
- (g) Environmental and Regulatory Compliance Costs. Applicants must include a line item in their budget to cover environmental compliance costs. "Environmental compliance costs" refer to costs incurred by Reclamation or the recipient in complying with environmental regulations applicable to a WaterSMART Grant, including costs associated with any required documentation of environmental compliance, analyses, permits, or approvals. Applicable Federal environmental laws could include NEPA, ESA, NHPA, and the Clean Water Act, and other regulations depending on the project. Such costs may include, but are not limited to:
  - The cost incurred by Reclamation to determine the level of environmental compliance required for the project
  - The cost incurred by Reclamation, the recipient, or a consultant to prepare any necessary environmental compliance documents or reports

- The cost incurred by Reclamation to review any environmental compliance documents prepared by a consultant
- The cost incurred by the recipient in acquiring any required approvals or permits, or in implementing any required mitigation measures

The amount of the line item should be based on the actual expected environmental compliance costs for the project. However, the minimum amount budgeted for environmental compliance should be equal to at least 1-2 percent of the total project costs. If the amount budgeted is less than 1-2 percent of the total project costs, you must include a compelling explanation of why less than 1-2 percent was budgeted. Any environmental compliance costs that exceed the amount you budgeted for must generally be paid for solely by you.

How environmental compliance activities will be performed (e.g., by Reclamation, the applicant, or a consultant), and how the environmental compliance funds will be spent, will be determined pursuant to subsequent agreement between Reclamation and the applicant. If any portion of the funds budgeted for environmental compliance is not required for compliance activities, such funds may be reallocated to the project, if appropriate.

- (h) Reporting. Recipients are required to report on the status of their project on a regular basis. Include a line item for reporting costs (including final project and evaluation costs). Please see Section VI.C for information on types and frequency of reports required.
- (i) Other. Any other expenses not included in the above categories shall be listed in this category, along with a description of the item and what it will be used for. No profit or fee will be allowed.
- (j) Indirect Costs. Show the proposed rate, cost base, and proposed amount for allowable indirect costs based on the applicable OMB circular cost principles (see Section III E., "Cost Sharing Requirement") for the recipient's organization. It is not acceptable to simply incorporate indirect rates within other direct cost line items.

If the recipient has separate rates for recovery of labor overhead and general and administrative costs, each rate shall be shown. The applicant should propose rates for evaluation purposes, which will be used as fixed or ceiling rates in any resulting award. Include a copy of any federally approved indirect cost rate agreement.

If you do not have a federally approved indirect cost rate agreement, or if unapproved rates are used, explain why, and include the computational basis for the indirect expense pool and corresponding allocation base for each rate. Information on "Preparing and Submitting Indirect Cost Proposals" is

available from Interior, the National Business Center, and Indirect Cost Section, at <a href="http://www.aqd.nbc.gov/services/ICS.aspx">http://www.aqd.nbc.gov/services/ICS.aspx</a>>.

- (k) Total Cost. Indicate total amount of project costs, including the Federal and non-Federal cost-share amounts.
- **(4) Budget Form.** In addition to the above-described budget information, the applicant must complete an SF-424A, Budget Information Nonconstruction Programs, or an SF-424C, Budget Information Construction Programs. These forms are available at <a href="http://apply07.grants.gov/apply/FormLinks?family=15">http://apply07.grants.gov/apply/FormLinks?family=15</a>.

# **E. Funding Restrictions**

See Section III.E.3 for restrictions on incurrence and allowability of pre-award costs.

**Table 1. Sample Budget Proposal Format** 

	COMPUTATION		DECIDIENT	DEGLAMATION	TOTAL COST
BUDGET ITEM DESCRIPTION	\$/Unit and Unit	Quantity RECIPIENT FUNDING		RECLAMATION FUNDING	
SALARIES AND WAGES					
Employee 1					
Employee 2					
Employee 3					
FRINGE BENEFITS					
Full-time employees					
Part-time employees					
TRAVEL					
Trip 1					
Trip 2					
Trip 3					
EQUIPMENT					
Item A					
Item B					
Item C					
SUPPLIES/MATERIALS					
Office supplies					
Construction					
CONTRACTUAL/1 CONSTRUCTION					
Item 1					
Item 2					
ENVIRONMENTAL AND REGULATORY COMPLIANCE <sup>2</sup>					
OTHER					
Reporting					
TOTAL DIRECT COSTS					
INDIRECT COSTS%					
TOTAL PROJECT COSTS					

<sup>&</sup>lt;sup>1</sup> Contracts should be broken out into specific line items. **Lump sum estimates are not acceptable.** Applicants may attach a separate, detailed budget for each contract to adequately address all contractor budget items.

 $<sup>^{2}</sup>$  Environmental and regulatory compliance should be at least 1-2 percent unless a justification is provided for a lesser amount.

# Section V—Application Review Information

#### A. Review and Selection Process

The Government reserves the right to reject any and all applications which do not meet the requirements of this FOA, or are outside the scope of WaterSMART Grants. Awards will be made for projects most advantageous to the Government. Award selection may be made to maintain balance among the program tasks listed in Section III.B. The evaluation process will be comprised of three steps.

#### 1. First-Level Screening

All applications will be screened to ensure that:

- The application meets the requirements of the FOA package, including submission of technical and budget proposals, a funding plan, letter(s) of commitment, and related forms.
- The application contains a properly executed SF-424 Application for Financial Assistance and a form SF-424B, Assurances—Non-Construction Programs, or SF-424D, Assurances—Construction Programs.
- The application includes an official resolution, adopted by the applicant's board of directors, governing body, or appropriate authorized official.
- At least 50 percent of the cost of the project will be paid for with non-Federal funding. Cost share funding commitments are to be submitted to Reclamation by September 1, 2010.
- The applicant meets the eligibility requirements stated in this document.
- The application meets the description of eligible projects in Section III.B., "Eligible Projects," of this document (Tasks A-D) and is within the scope of WaterSMART Grants.
- The project can be completed by September 30, 2012.

An application must pass all First-Level Screening criteria in order for it to be forwarded for further consideration at the Second-Level Evaluation phase.

#### 2. Second-Level Evaluation (Technical Review)

Technical criteria will comprise 100 points of the total evaluation weight as stated in Section IV.D.2.e(4). Applications will be scored against the technical criteria by an Application Review Committee (ARC), made up of experts in relevant disciplines selected from across Reclamation.

#### 3. Third-Level Evaluation (Managerial Review)

Management will prioritize projects to ensure the total amount of all awards does not exceed available funding levels, to ensure balance among the program tasks, and to ensure that the projects meet the scope and priorities of the WaterSMART program. Positive or negative past performance by the applicant and any partners in previous working relationships with Reclamation may be considered.

## **B. Pre-Award Clearances and Approvals**

After completion of the third-level evaluation, Reclamation will notify applicants whose proposals have been selected for award consideration and will forward their applications to the appropriate Reclamation regional or area office for completion of environmental compliance.

The local Reclamation office will also complete a business evaluation and determination of responsibility. During these evaluations, the Grants Officer (GO) will also consider several factors which are important, but not quantified, such as:

- Pre-award clearances, determinations, reviews, and approvals
- Allowability and allocability of proposed costs
- Financial strength and stability of the organization
- Past performance, including satisfactory compliance with all terms and conditions of previous awards, such as environmental compliance issues, reporting requirements, proper procurement of supplies and services, and audit compliance
- Adequacy of personnel practices; procurement procedures; and accounting policies and procedures, as established by applicable OMB circulars.

If the results of all pre-award reviews and clearances are satisfactory, an award of funding will be made once the agreement is finalized (approximately one to three months from date of initial selection).

# Section VI—Award Administration Information

#### A. Award Notices

Successful applicants will receive, by electronic or regular mail, a notice of award.

#### **B. Award Document**

If the applicant is awarded a financial assistance agreement as a result of this FOA, the proposed project and other relevant information from the application will be referenced in the agreement. Examples of award documents, including applicable terms and conditions, may be viewed at <a href="http://www.usbr.gov/mso/aamd/doing-business-financial-assistance.html">http://www.usbr.gov/mso/aamd/doing-business-financial-assistance.html</a>. The agreement document must be signed by a Reclamation GO before it becomes effective.

### C. Reporting Requirements and Distribution

If the applicant is awarded an agreement as a result of this FOA, the applicant will be required to submit the following types of reports during the term of the agreement.

#### 1. Financial Reports

• SF-425, Federal Financial Report

#### 2. Program Performance Reports

- Semi-annual reports
- Final report (please note final reports are public documents and will be made available on Reclamation's website)

#### 3. Significant Development Reports

# **Section VII—Agency Contacts**

There will be no pre-application conference. Organizations or individuals interested in submitting applications in response to this FOA may *direct questions to Reclamation in writing*. Questions may be submitted to the attention of Stephanie Bartlett, GO, as follows:

#### By mail:

Bureau of Reclamation Acquisition Operations Group Attn: Stephanie Bartlett Mail Code: 84-27810 P.O. Box 25007 Denver CO 80225

#### Overnight delivery:

Bureau of Reclamation Attn: Stephanie Bartlett Mail Code: 84-27810 Denver Federal Center, Bldg. 67 Rm. 152 6<sup>th</sup> Avenue and Kipling Street Denver CO 80225

#### By e-mail:

sbartlett@usbr.gov

# Section VIII—Other Information

#### A. Performance Measures

All WaterSMART Grant applicants are required to propose a method (or "performance measure") of quantifying the actual benefits of their project once it is completed. Actual benefits are defined as water actually conserved, marketed, or better managed, as a direct result of the project. A provision will be included in all assistance agreements with WaterSMART Grant recipients describing the performance measure, and requiring the recipient to quantify the actual project benefits in their final report to Reclamation upon completion of the project. Quantification of project benefits is an important means of determining the relative effectiveness of various water management efforts, as well as the overall effectiveness of WaterSMART Grants.

The following information is intended to provide applicants with examples of some acceptable performance measures that may be used to estimate pre-project benefits and to verify water saved or marketed after the project is completed. However, the following is not intended to be an exclusive list of acceptable performance measures. Applicants are encouraged to propose alternatives to the measures listed below if another measure is more effective for the particular project. Reclamation understands that, in some cases, baseline information may not be available, and that methods other than those suggested below may need to be employed. If an alternative performance measure is suggested, the applicant must provide information supporting the effectiveness of the proposed measure as applied to the proposed project.

#### 1. Canal Lining or Piping

Canal lining or piping projects are implemented to decrease canal seepage and evaporation.

#### Pre-project estimations of baseline data:

To calculate potential water savings, physical measurements of seepage losses are necessary. Two testing procedures which can be used are listed below:

- **Ponding tests:** Conduct ponding tests along canal reaches proposed for lining or piping.
- **Inflow/Outflow testing:** Measure water flowing in and out of the canal reach, taking evaporation into consideration.

If ponding or inflow/outflow tests cannot be performed, document the estimated historical seepage and evaporation rates for the canal reach based on historical knowledge.

# Postproject methods for quantifying the benefits of canal lining or piping projects:

- Using tests listed above, compare preproject and postproject test results to calculate water savings. For inflow and outflow testing, remember to consider losses from evaporation.
- If ponding or inflow/outflow tests cannot be performed, benefits can be calculated by comparing the estimated historic seepage and evaporation rates for the canal reach to the post project seepage and evaporation.
- Results can be verified using a ratio of historic diversion-delivery rates. Also include a comparison of historical canal efficiencies and current canal efficiencies. For example, if an irrigation district needed to divert 6 acre-feet of water to deliver 2 acre-feet of water to a field through an unlined or unpiped canal, this would be a 67-percent inefficiency ([100%-(2 acre-feet/6 acre-feet \*100)]=67% inefficiency). If after lining or piping the canal, the irrigation district only needed to divert 4 acre-feet of water to deliver the 2 acre-feet; this would be a 17-percent improvement in efficiency ([100%-(2 acre-feet/4 acre-feet \*100)]=50% inefficiency).
- Record reduction in water purchases by shareholders and compare to historical water purchases. Use of this method would require consideration and explanation of other potential reasons for decreased water purchases.

For more information regarding canal seepage monitoring and verification, visit <a href="http://www.agwatercouncil.org/Monitoring-Protocols/Monitoring-Protocols/Monitoring-Protocols/menu-id-61.html">http://www.agwatercouncil.org/Monitoring-Protocols/Monitoring-Protocols/Monitoring-Protocols/menu-id-61.html</a>.

#### 2. Measuring Devices

Good water management requires accurate water measurement. Potential benefits derived from measurement include:

- Quantification of system losses between measurement locations
- Accurate billing of customers for the actual amount of water used
- Facilitation of accurate and equitable distribution of water within a district
- Implementation of future system improvements such as remote flow monitoring and canal operation automation

Installation of measuring devices may include, but are not limited to, the following:

- Flow meters
- Weirs
- Flumes
- Meter gates

#### Preproject estimations of baseline data:

Preproject flows are difficult to estimate without a measuring device in place. However, the applicant may be able to use data from measurement devices located elsewhere in the delivery system (if available). Otherwise, the applicant may have to rely on other historical data.

# Postproject methods for quantifying the benefits of projects to install measuring devices:

- Compare postproject water measurement (deliveries or consumption) data to preproject water uses.
- Compare preproject and postproject consumptive use by crop via remote-sensing information.
- Survey users to determine utility of the devices for decision making.
- Document the benefits of any rate structure changes made possible by the installation of measuring devices. For example, if districts are able to convert from billing water users at a flat rate to billing for actual water use using a volumetric or tiered water pricing structure. (Assumes conversion from a nonmetered to metered district.)

### 3. New Technologies for Improved Water Management

#### a. Data Acquisition

Proposals may involve the installation or expansion of a SCADA system that monitors flows in an individual district or in a basin including several districts. SCADA systems provide water managers with real-time data on the flow and volume of water at key points along a water delivery system. Access to such data allows water managers to make accurate and timely deliveries of water, reducing over-deliveries and spillage at the end of the canal.

#### Preproject estimations of baseline data:

- Collect data on diversions and deliveries to water users, making estimates if necessary
- Document employee time spent preproject on ditch/canal monitoring and water control

#### Postproject methods for quantifying benefits of SCADA system projects:

- Calculate amount of increased carryover storage in associated reservoirs.
   This is a long-term measure which will be more meaningful over a period of years.
- Track and record the diversions to water users and compare to preproject diversions. This would show results of improved management if yearly fluctuations in weather are accounted for.
- Report delivery improvements (i.e., changes in supply, duration, or frequency that are available to end users because of SCADA).
- Document other benefits such as less mileage by operators on dusty roads (which saves time and influences air quality) and less damage to canal banks due to fluctuating water levels in canals.

#### b. System Control

Proposals may include system automaton projects aimed at *preventing* spillage from canals, or drainage capture/reuse projects focused on *intercepting* spills and redirecting them to drains, canals, or reregulation reservoirs for reuse.

#### (1) Spillage Reduction through System Automation.

#### Preproject estimations of baseline data:

- Establish baseline data by measuring existing spillage or document historic spillage. A rated measuring device should be positioned to measure spillage losses. To account for temporal variations, a minimum of a one-year history of preproject measurements is desirable for future comparison to postproject water usage. Spillage volumes can vary substantially between wet and dry years; therefore, some multiyear estimates of spillage may be necessary.
- Track preproject water diversions using district or State diversion records.

#### Postproject methods for quantifying benefits of spillage reduction projects:

- Using rated devices, measure postproject flows. Gather enough data to account for seasonal and temporal variations. Using baseline and postproject data, calculate savings using the following calculation: Savings = (Spillage)<sub>w/o project</sub> (Spillage)<sub>w/project</sub>.
- Track postproject changes in the amount of water diverted and compare to preproject diversion data.
- Compare estimated historic spills from district/project boundaries to postproject spills.
- Document how the additional water resulting from the reduction in spillage was used (i.e., water retained in the river to support riparian habitat, transferred for another use, or used to meet normal water demands in times of drought).
- Report specific volume changes to spills, diversions, or deliveries due to system automation.

For more information regarding canal seepage monitoring and verification, visit <a href="http://www.agwatercouncil.org/images/stories/monitoring\_and\_verification\_can\_al\_seepage.pdf">http://www.agwatercouncil.org/images/stories/monitoring\_and\_verification\_can\_al\_seepage.pdf</a>>

(2) **Drainage Reuse Projects.** Drain water reuse can be a district level or regional conservation effort that consists of recovering residual irrigation water from drains and returning it to the water supply system for delivery to users.

Several types of projects can focus on drainage and reuse, including:

- Pump stations with constant flow rates
- Variable speed pump stations without SCADA controls
- Variable pump stations with SCADA controls
- Storage reservoirs with pump stations and constant flow rate
- Storage reservoirs with variable speed pump stations and SCADA controls

#### Preproject estimations of baseline data:

 A rated measuring device should be positioned to measure drain water losses. To account for temporal variations, a minimum of a one-year history of preproject measurements is desirable for future comparison to postproject water usage. Drainage volumes can vary substantially between wet and dry years; therefore, some multiyear measurements of drain water losses may be necessary.

#### Postproject methods for quantifying benefits of drainage reuse projects:

Using rated devices, measure post-project flows. Gather enough data to account for seasonal and temporal variations. Using baseline data and post-project data, calculate savings using the following calculation: Savings = (Drainage  $_{\text{w/o project}}$ -Drainage  $_{\text{w/project}}$ ) + (Spillage  $_{\text{w/o project}}$ -Spillage  $_{\text{w/project}}$ ).

- Take readings from measuring devices positioned to measure drain water loss. A system analysis can be done with the following calculation: Drainage w/project = (1-%Reuse)\*Drainage w/o project.
- Measure and record post-project water deliveries to fields, tailwater volumes entering reservoirs and tailwater volumes recycled to fields. Compare this data to previous history.
- Estimate any benefits to farmers, such as improved flexibility in water management, reduction in shortages of supply to tailenders, etc. If it is not possible to quantify these benefits in acre-feet, a narrative explanation is acceptable.

For more information regarding drainage reuse monitoring and verification, visit <a href="http://www.agwatercouncil.org/Monitoring-Protocols/Monitoring-Protocols/Monitoring-Protocols/menu-id-61.html">http://www.agwatercouncil.org/Monitoring-Protocols/Monitoring-Protocols/Monitoring-Protocols/menu-id-61.html</a>>.

#### c. Evapo-transpiration Controllers

An ET controller automatically adjusts the amount of water applied to landscape based on weather conditions. The "smart" ET controller receives radio, pager, or Internet signals with ET information, so that watering is limited to the replacement of only the moisture that the landscape lost due to heat, humidity, and wind. Other controllers use historical data to adjust the watering program.

#### Preproject estimations of baseline data:

Domestic (interior) water usage: In many cases, landscape water use and domestic water use are measured together. In these cases, domestic water use can be estimated and then subtracted from the total water use to estimate landscape water use using one of the following methods:

• Domestic water use can be estimated based on the number of persons in the household and type of plumbing (low flow or not).

 Domestic usage can also be estimated using the assumption that landscape water is negligible during certain parts of the year, and therefore,
 Domestic Usage = (Average Use per Capita) determined non-irrigation season.

Once the domestic usage value is obtained, landscape water applied can be calculated using the following calculation:

(Landscape water applied) w/o ET Controllers = Total water use - Domestic Water

#### Postproject suggested methods for quantifying benefits of ET controllers:

- To calculate water savings, the following calculation can be applied: Estimated Savings = N [(Average amount of landscape water applied per participant)  $_{\text{w/o ET Controller}}$  (Average amount of landscape water applied per participant)  $_{\text{w/ET Controller}}$ ] where N = number of participants (households or landscapes)
- Compare meter readings prior to ET controller installation and postinstallation.
- Compare actual water applied postproject to estimated water application if only using sprinkler controller on a set timer application.

For more information regarding ET controller monitoring and verification, visit <a href="http://www.agwatercouncil.org/Monitoring-Protocols/Monitoring-Protocols/menu-id-61.html">http://www.agwatercouncil.org/Monitoring-Protocols/Monitoring-Protocols/menu-id-61.html</a>.

#### d. On-Farm System Improvements

On-farm system improvements increase the efficiency of the irrigation system by reducing water losses from deep percolation and unrecoverable tailwater.

Irrigation system improvements may include:

- Converting to more efficient irrigation systems based on crops, soil, terrain, and weather conditions.
- Upgrading existing irrigation systems (i.e., shifting sprinkler nozzle size, upgrading to surge irrigation).
- Improving irrigation scheduling, management, or delivery methods.

#### Preproject estimations of baseline data:

Documentation of water savings based on delivered water is complicated by the fact that crops are rotated from year to year, and weather patterns and water availabilities also change. However, you should record on-farm water deliveries and crop ET of irrigation water to make post-project comparisons possible.

#### Postproject methods for quantifying the benefits of on-farm improvements:

- Record postproject on-farm water deliveries and crop ET of irrigation water and apply the following forming:
   Savings = [(On-farm delivery)/(Crop ET of irrigation water) w/o project] [(On-farm delivery)/(Crop ET of irrigation water)] w/project
- Monitor delivery to affected fields and calculate water savings using delivery records and calculation above.
- Compare postproject volume of water applied and runoff with the historical water volume applied and runoff.
- Document the Distribution Uniformity (DU) of the original system and compare it to the new system DU because yield and water savings may be difficult to document over a 1-year study period due to yearly and crop variations.

For more information regarding canal seepage monitoring and verification visit <a href="http://www.agwatercouncil.org/Monitoring-Protocols/Monitoring-Protocols/menu-id-61.html">http://www.agwatercouncil.org/Monitoring-Protocols/Monitoring-Protocols/menu-id-61.html</a>.

#### 4. Water Banks and Water Markets

#### a. Water Marketing (Transfers)

Water marketing is the temporary or long-term transfer of the right to use water from one user to another, by sale, lease, or other form of exchange, as allowed under State laws. Water marketing is a method of moving water supplies to areas of greatest financial value and can be a useful mechanism to increase the beneficial use of existing water supplies. Depending on the State laws, there are various methods in which a seller can make water available for transfer.

#### Examples include:

- 1. Ground water substitution is one method in which a seller uses their ground water resources in-lieu of receiving surface water. This frees up the surface water for transfer.
- 2. Crop idling or shifting, whereby sellers agree to idle fields or shift from higher to lower water using crops, can make water available for transfer. The seller is then able to transfer water based on the difference in crop consumption that is realized from the idling or shifting.
- 3. Conserved water made available through canal modernization or other conservation projects may also be available for transfer, depending on State laws.

To identify other methods that can be used by a seller to transfer water, consult State law.

#### Preproject estimations of baseline data:

Collect preproject monthly ground water pumping, water consumption, water quality, diversion, and cropping information, using measuring devices and/or historical data.

#### Postproject methods for quantifying benefits of water marketing projects:

#### **Ground Water Substitution Transfers**

- Track monthly diversions, by year and type of use (agriculture, municipal, environmental, etc.), for both the buyer and seller of the marketed water and compare to preproject diversions.
- For all wells utilized in the transfer, track monthly ground water pumping, by year and type of use and compare to preproject pumping volumes. This should be done with inline flowmeters.
- Provide a map indicating location of ground water wells and all features of the underlying aquifer to ensure that the ground water is not impacting streamflows.
- Compare postproject ground water pumping costs, including capital and O&M costs to preproject costs.

#### **Crop Shifting or Idling Transfers**

- Track monthly diversions by year and type of use and/or crop, before and after project implementation, for both the buyer and seller of the marketed water.
- Compare cropping records by year and crop type, and compare preproject and postproject records for seller of the marketed water.
- Devise a field monitoring procedure to verify that fields remain fallowed.
- Use remote-sensing technology to verify fallowed fields, crop water consumption, and uniformity of crop water consumption on seller(s)' fields.

#### **Other Transfers**

- Compare prewater market streamflow measurements with streamflow measurements during the water market period.
- Compare pre- and post-water market effects in terms of the length of the irrigation season. Determine whether or not water marketing helped extend the irrigation season.
- Compare pre- and post-water balances that are associated with the seller(s)' transfer where the differences were used or stored. The water balance should include all water supplies, uses, and losses associated with the water that was transferred.
- Measure the benefits resulting from the application of the transferred water. For example, state how many acres were irrigated that could not otherwise have been irrigated or whether the transfer had environmental benefits, such as providing flows for endangered fish or aquatic species or maintaining wetland areas.
- Compare pre-water market stream water quality measurements with measurements during the water market period. This may include pre/post changes in water temperature during critical months, pathogens, bacteria count, etc.
- Document local economic impacts of transfer.

#### b. Ground Water Banking (Conjunctive Use)

Some districts are implementing programs regarding ground water banking to control water quantity and quality issues. Program elements may address:

- Active accounting of water supply and monitoring of water quality
- Rules regulating ground water deposits and withdrawals including production limits
- Creation or expansion of recharge and/or recharge capabilities
- Pricing incentives for users to use conjunctive use of water supplies
- Securing reliable surface water supply

#### Preproject estimations of baseline data:

- Establish a baseline with historical data from existing wells, including pumping volumes (amount, duration, and timing) and depth to ground water elevations
- Document streamflows and spring discharges

# Postproject methods for quantifying the benefits of ground water banking projects:

- Compare preproject and postproject recharge and/or pumping volumes
- Compare preproject and postproject changes (amount, duration, and timing) in affected streamflows or changes in spring discharge related to ground water banking
- Compare preproject and postproject depth to ground water elevations
- Determine changes in net ground water use through a water table-specific yield method coupled with a detailed sub-basin hydrologic balance

#### 5. Energy Efficiency

Energy efficiency projects are intended to increase the use of renewable energy and increase overall energy efficiency in the management and delivery of water. Applicants should address the following as part of the performance measures they submit with their applications:

# a. Implementation of Renewable Energy Improvements Related to Water Management and Delivery

- Explain the methodology used for quantifying the energy generated from the renewable energy system
- Explain the methodology for calculating the quantity of energy savings resulting from the activity
- Explain anticipated cost savings for the project
- Include an estimate of energy conserved

#### b. Increasing Energy Efficiency in Water Management

- Explain the methodology for calculating the quantity of energy savings resulting from the water management improvements or water conservation improvements
- Explain anticipated cost savings

#### 6. Endangered Species Concerns

Improved water management and delivery should benefit endangered and/or candidate species. Applicants should address:

- The methodology used for determining the recovery rate of the threatened and/or candidate species
- How their projects will address designated critical habitats, including acres covered, species present, and how the water savings are expected to benefit the habitat

## **B. Environmental Compliance Requirements**

Before approving expenditures for the implementation of a WaterSMART Grant project, Reclamation is required to comply with applicable environmental laws. Such compliance requires the participation and cooperation of both Reclamation and WaterSMART Grant recipients. This information is intended to inform applicants about the environmental compliance process associated with WaterSMART Grant projects and to summarize the requirements of certain Federal environmental laws.

Reclamation addresses environmental compliance issues for WaterSMART Grant applications as 1) an initial review and 2) a more detailed view of projects initially recommended for award. First, as part of the initial recommendation process, Reclamation evaluates the appropriateness of the amount budgeted for environmental compliance. Reclamation also examines the proposal to determine whether any significant environmental issues are involved in the project. Second, once a proposal has been initially recommended for funding, Reclamation undertakes a more detailed examination of environmental issues associated with the proposed project to comply with applicable law.

#### 1. Review within the Application Evaluation Process

In the evaluation and selection process, Reclamation performs an initial review of the WaterSMART Grant applications for potential environmental issues. At this stage, Reclamation's review is focused on whether:

- The applicant has budgeted appropriately for environmental compliance
- Any significant environmental issues (i.e., issues that would make the project infeasible) are apparent.

Applicants for WaterSMART Grant funding must include a line item in their budget estimating the cost of environmental compliance for their project. The amount budgeted should be based on the actual expected environmental compliance costs, but should be equal to *at least* 2 percent of the total project costs. If less than 2 percent is budgeted, you must provide justification. Applications will be scored based on whether the amount budgeted appears reasonable.

Environmental compliance costs that are included in the your budget proposal are considered project costs and may be cost shared by the recipient and Reclamation. Any actual costs above the amount you budgeted for must generally be paid for solely by you. If too much is budgeted for environmental compliance, any remaining funding may generally be reallocated to cover other project costs.

Environmental compliance costs have varied greatly for past projects. A minimal number of projects have incurred environmental compliance costs in excess of the 2-percent budgeted amount. In each of those cases, the overage has been the result of issues involving historic properties, the presence of endangered species, or other compliance concerns requiring a more lengthy assessment of specific issues.

In addition to budgeting for environmental costs, the FOA requests that applicants for WaterSMART Grant project funding answer a series of questions about the potential environmental impacts of their proposed project. In general, applications will not be scored lower in this first step of the environmental review based on the significance of the environmental issues involved. Rather, the information about environmental impacts is used by Reclamation primarily to determine if the you have budgeted appropriately. However, in some extreme cases, a proposal may be eliminated from further consideration at this stage if the magnitude of the environmental issues would make the project infeasible.

#### 2. Review of Initially Recommended Projects

If a proposal is initially recommended for funding, a detailed analysis will be performed to determine the actual environmental impacts of the project, to agree on any mitigation measures needed, and to document environmental compliance. The recipient will then work with Reclamation to provide the information necessary for Reclamation to complete the environmental compliance work.

To the extent possible, environmental compliance will be completed before a cooperative agreement is signed by the parties. In all other cases, **the award will be made contingent on completion of environmental compliance**, and the

assistance agreement will describe how compliance will be carried out and how it will be paid for. WaterSMART Grant funding may not be applied to construction or implementation of the project itself unless and until this second level of environmental analysis is completed to comply with all applicable environmental laws.

#### 3. Overview of Relevant Environmental Laws

Following is a brief overview of NEPA, NHPA, and ESA. While these statutes are not the only environmental laws that may apply to WaterSMART Grant projects, they are the Federal laws that most frequently do apply. Compliance with all applicable environmental laws will be initiated by Reclamation concurrently, immediately following the initial recommendation of a WaterSMART Grant award. The descriptions below are intended to provide you with information about the environmental compliance issues that may apply to your projects and to help you budget appropriately for the associated compliance costs.

#### a. National Environmental Policy Act

NEPA requires Federal agencies such as Reclamation to evaluate—during the decision-making process—the potential environmental effects of a proposed action and any reasonable mitigation measures. Before Reclamation can make a decision to fund a WaterSMART Grant project, Reclamation must comply with NEPA. Compliance with NEPA can be accomplished in several ways, depending upon the degree and significance of environmental impacts associated with the proposal:

- Some projects may fit within a recognized Categorical Exclusion (CE) to NEPA (i.e., one of the established categories of activities that generally do not have significant impacts on the environment). If a project fits within a CE, no further NEPA compliance measures are necessary. Use of a CE can involve simple identification of an applicable Departmental CE or documentation of a Reclamation CE using a Categorical Exclusion Checklist (CEC). If a CE is being considered, Reclamation will have to determine the applicability of the CE and whether extraordinary circumstances (i.e., reasons that the CE cannot be applied) exist. That process takes anywhere from 1 day to about 30 days, depending upon the specific situation.
- If the project does not fit within a CE, compliance with NEPA might require preparation of an **Environmental Assessment/Finding of No Significant Impact (EA/FONSI).** Generally, where no CE applies but there are not believed to be any significant impacts associated with the proposed action, an EA will be required. The EA is used to determine whether any potentially significant effects exist (which would trigger the further step of an Environmental Impact Statement, below). If no potentially significant effects are identified, the EA process ends with the preparation of a FONSI. The EA/FONSI process is more detailed than the

CE/CEC process and can take weeks or even months to complete. Consultation with other agencies and public notification are part of the EA process.

• The most detailed form of NEPA compliance, where a proposed project has potentially significant environmental effects, is completion of an Environmental Impact Statement (EIS) and Record of Decision. An EIS requires months or years to complete, and the process includes considerable public involvement, including mandatory public reviews of draft documents. It is not anticipated that projects proposed under this program will require completion of an EIS.

During the NEPA process, potential impacts of a project are evaluated in context and in terms of intensity (e.g., will the proposed action affect the only native prairie in the county? Will the proposed action reduce water supplied to a wetland by 1 percent? or 95 percent?) The best source of information concerning the potentially significant issues in a project area is the local Reclamation staff, who have experience in evaluating effects in context and by intensity. You are encouraged to contact your regional or area Reclamation office (See <a href="http://www.usbr.gov/main/regions.html">http://www.usbr.gov/main/regions.html</a>) with questions regarding NEPA compliance issues or you may contact Dean Marrone, WaterSMART Program Coordinator, at 303-445-3577 for further information.

#### b. National Historic Preservation Act

To comply with Section 106 of the NHPA, Reclamation must consider whether a proposed project has the *potential to cause effects to historic properties*, before it can award a WaterSMART Grant. "Historic properties" are cultural resources (historic or prehistoric districts, sites, buildings, structures, or objects) that qualify for inclusion in the National Register of Historic Places. In some cases, water delivery infrastructure that is over 50 years old can be considered a "historic property" that is subject to review.

If a proposal is selected for initial award, WaterSMART Grant recipients will work with Reclamation to complete the Section 106 process. Compliance can be accomplished in several ways—depending on how complex the issues are—including:

- If Reclamation determines that the project does *not* have the potential to cause effects to historic properties, then Reclamation will document its findings and the Section 106 process will be concluded. This can take anywhere from a couple of days to one month.
- If Reclamation determines that the proposed project *could* have effects on historic properties, a multi-step process, involving consultation with the State Historic Preservation Officer and other entities, will follow. Depending on the nature of the project and impacts to cultural resources,

consultation can be complex and time consuming. The process includes a determination as to whether additional information is necessary; evaluation of the significance of identified cultural resources; assessment of the effect of the project on historic properties; and, if the project would have an adverse effect, evaluation of alternatives or modifications to avoid, minimize, or mitigate the effects. A Memorandum of Agreement is then used to record and implement any necessary measures. At a minimum, completion of the multi-step Section 106 process takes about two months.

Among the types of historic properties that might be affected by WaterSMART Grants are **historic irrigation systems** and **archaeological sites**. An irrigation system or a component of an irrigation system (e.g., a canal or headgate) is more likely to qualify as historic if it is more than 50 years old, if it is the oldest (or an early) system/component in the surrounding area, and if the system/component has not been significantly altered or modernized. In general, WaterSMART Grant projects that involve ground disturbance, or the alteration of existing older structures, are more likely to have the potential to affect cultural resources. However, the level of cultural resources compliance required and the associated cost, depends on a case-by-case review of the circumstances presented by each proposal.

You should contact your State Historic Preservation Office and your local Reclamation office's cultural resources specialist to determine what, if any, cultural resources surveys have been conducted in the project area. See <a href="http://www.usbr.gov/cultural/crmstaff.html">http://www.usbr.gov/cultural/crmstaff.html</a> for a list of Reclamation cultural resource specialists. If an applicant has previously received Federal financial assistance, it is possible that a cultural resources survey has already been completed.

#### c. Endangered Species Act

Pursuant to Section 7 of the ESA, each Federal agency is required to consult with the U.S. Fish and Wildlife Service (USFWS) or the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service to ensure any action it authorizes, funds, or carries out is not likely to *jeopardize the continued existence* of any endangered or threatened species or destroy or adversely modify any designated critical habitat.

Before Reclamation can approve funding for the implementation of a WaterSMART Grant project, it is required to comply with Section 7 of the ESA. The steps necessary for ESA compliance vary, depending on the presence of endangered or threatened species and the effects of the project. A rough overview of the possible course of ESA compliance is:

- If Reclamation can determine that there are no endangered or threatened species or designated critical habitat in the project area, the ESA review is complete and no further compliance measures are required. This process can take anywhere from one day to one month.
- If Reclamation determines that endangered or threatened species may be affected by the project, then a "Biological Assessment" must be prepared by Reclamation. The Biological Assessment is used to help determine whether a proposed action may affect a listed species or its designated critical habitat. The Biological Assessment may result in a determination that a proposed action is not likely to adversely affect any endangered or threatened species. If the USFWS/NOAA Fisheries Service concurs in writing, then no further consultation is required and ESA compliance is complete. Depending on the scope and complexity of the proposed action, preparation of a Biological Assessment can range from days to weeks or even months. The USFWS/NOAA Fisheries Service generally respond to requests for concurrence within 30 days.
- If it is determined that the project is likely to adversely affect listed species, further consultation ("formal consultation") with USFWS or NOAA Fisheries Service is required to comply with the ESA. The process includes the creation of a Biological Opinion by the USFWS/NOAA Fisheries Service, including a determination of whether the project would "jeopardize" listed species and, if so, whether any reasonable and prudent alternatives to the proposed project are necessary to avoid jeopardy. Nondiscretionary reasonable and prudent measures and terms and conditions to minimize the impact of incidental take may also be included. Under the timeframes established in the ESA regulations, the Biological Opinion is issued within 135 days from the date that formal consultation was initiated, unless an extension of time is agreed upon.

Obviously, the time, cost, and extent of the work necessary to comply with the ESA depends upon whether endangered or threatened species are present in the project area and, if so, whether the project might have effects on those species significant enough to require formal consultation.

ESA compliance is often conducted parallel to the NEPA compliance process and, as in the case of categorical exclusion checklists, documented simultaneously. The best source of information concerning the compliance with the ESA in a particular project area is the local Reclamation environmental staff, who can be helpful in determining the presence of listed species and possible effects that would require consultation with the USFWS or National Marine Fisheries Service. You are encouraged to contact your regional or area Reclamation office (see <a href="http://www.usbr.gov/main/regions.html">http://www.usbr.gov/main/regions.html</a>) with questions regarding ESA compliance issues or you may contact Dean Marrone, WaterSMART Program Coordinator, at 303-445-3577 for further information.

## C. General Provisions

The General Provisions applicable to this agreement are available at: <a href="http://www.usbr.gov/mso/aamd/doing-business-financial-assistance.html">http://www.usbr.gov/mso/aamd/doing-business-financial-assistance.html</a>>. The General Provisions are included within the Standard Document Templates shown on that page. Please review the appropriate recipient and project type template document applicable to your application.

Applicants are advised to review 43 CFR 12 for further guidance relating to the administration of an anticipated agreement beyond the point of award.

### D. Electronic Application through Grants.gov

NOTE: Some applicants have experienced difficulties when attempting to submit their applications electronically through Grants.gov. If you encounter problems with the Grants.gov application submission process, you must contact the Grants.gov Help Desk to obtain a "Case Number." This will provide evidence of your attempt to submit an application prior to the submission deadline.

#### 1. Applying for Funds Online at Grants.gov

Reclamation is participating in the Grants.gov initiative that provides the grant community with a single website to find and apply for grant funding opportunities. Reclamation encourages applicants to submit their applications for funding electronically through <a href="http://www.grants.gov/applicants/">http://www.grants.gov/applicants/</a> apply for grants.jsp>. Applicant resource documents, and a full set of instructions for registering with Grants.gov and completing and submitting applications online are available at: <a href="http://www.grants.gov/applicants/">http://www.grants.gov/applicants/</a> resources.jsp>.

If you need assistance with Grants.gov, the Contact Center is open 24 hours a day, 7 days a week. You may reach the Grants.gov Contact Center by email at <support@grants.gov> or by calling 1-800-518-4726.

The following checklist is provided to give you a summary of the steps that are required to register with Grants.gov. This Registration process must be completed prior to submitting an electronic application through Grants.gov.

Additionally, see Step 2 below for completing the annual Central Contractor Registration (CCR) renewal process.

#### 2. Registering to Use Grants.gov (1-3 week process)

**Note:** (The following checklist information is available electronically at < <a href="http://www.grants.gov/assets/Organization\_Steps\_Complete\_Registration.pdf">http://www.grants.gov/assets/Organization\_Steps\_Complete\_Registration.pdf</a>>.)The registration is a **one-time** process, which is **required** before representatives of an

organization can submit grant application packages electronically through Grants.gov. The registration process can take three to five business days or one to three weeks—depending on your organization and if all steps are met in a timely manner. The checklist in Table 2 provides registration guidance for a company, academic or research institution, State, local or tribal government, not-for-profit, or other type of organization.

Note: If you are an individual applying for a grant on your own behalf and not on behalf of a company, academic or research institution, state, local or tribal government, not-for-profit, or other type of organization, refer to the Individual Registration:

<a href="http://www.grants.gov/applicants/individual\_registration.jsp">http://www.grants.gov/applicants/individual\_registration.jsp</a>>. If you apply as an individual to a grant application package designated for organizations, your application will be rejected.

Table 2. Checklist for Registering Your Organization in Grants.gov

 Table 2. Checklist for Registering Your Organization in Grants.gov						
 Step	Actions to take	Purpose	Time required			
1: Obtain Data Universal Number System (DUNS) Number	Has my organization identified its DUNS number?  Ask the grant administrator, chief financial officer, or authorizing official of your organization to identify your DUNS number.  If your organization does not know its DUNS number or needs to register for one, visit Dun & Bradstreet at <a href="http://fedgov.dnb.com/webform/display-HomePage.do">http://fedgov.dnb.com/webform/display-HomePage.do</a>	The Federal government has adopted the use of DUNS numbers to track how Federal grant money is allocated. DUNS numbers identify your organization.	Same Day. You will receive DUNS number information online.			
2: Register With Central Contractor Registration	Has my organization registered with the CCR?  Ask the grant administrator, chief financial officer, or authorizing official of your organization if your organization has registered with the CCR.  If your organization is not registered, you can apply online by going to <a href="http://www.ccr.gov">http://www.ccr.gov</a> . CCR has developed a handbook <a href="http://www.bpn.gov/ccr/doc/UserAccount.pdf">http://www.bpn.gov/ccr/doc/UserAccount.pdf</a> to help you with the process. If AFTER having registered in CCR, you experience any registration problems, you can get help by going to the Federal Service Desk <a href="https://www.fsd.gov">https://www.fsd.gov</a> .  When your organization registers with CCR, you must designate an E-Business Point of Contact (E-Biz POC). This person will identify a special password called an "M-PIN."	Registering with the CCR is required for organizations to use Grants.gov.	If your organization already has an Employer Identification Number (EIN) or Taxpayer Identification Number (TIN), then you should allow one – three business days to complete the entire CCR registration. The EIN and TIN will come from the Internal Revenue Service (IRS)  If your organization does not have an EIN or TIN, then you should allow two weeks for obtaining the information from the IRS when requesting the EIN or TIN via phone or Internet. The additional number of days needed is a result of security information that needs to be mailed to the organization.			

√ Step	Actions to take	Purpose	Time required
2: continued	This M-PIN gives the E-Biz POC authority to designate which staff member(s) from your organization are allowed to submit applications electronically through Grants.gov. Staff members from your organization designated to submit applications are called Authorized Organization Representatives (AORs).		

\*Note: Your organization needs to renew your CCR registration once a year. You will not be able to move on to Step 3 until you have renewed your CCR registration. This renewal may take up to 5 business days.

3: Username and Password	Have the AORs who officially submit applications on behalf of your organization completed their profile with Grants.gov to create their username and password?  To create a username and password, AORs must complete their profile on Grants.gov. AORs will need to know the DUNS number of the organization for which they will be submitting applications to complete the process.  After your organization registers with the CCR, AORs must wait one business day before they can complete a profile and create their usernames and passwords on Grants.gov.	An AOR username and password serves as an "electronic signature" when submitting a Grants.gov application.	Same Day. After the AOR has completed their profile they will be prompted to create a username and password that will allow the user to login and check their approval status immediately.
4: AOR Authorization	Has the E-Business Point of Contact (E-Biz POC) approved AORs to submit applications on behalf of the organization?  When an AOR registers with Grants.gov to submit applications on behalf of an organization, that organization's E-Biz POC will receive an email notification. The email the AOR submitted in the profile will be the email used when sending the automatic notification from Grants.gov to the E-Biz POC with the AOR copied on the correspondence.  The E-Biz POC must then login to Grants.gov (using the organization's DUNS number for the username and the "M-PIN" password (obtained in Step 2) and approve the AOR, thereby giving him or her permission to submit applications.  When an E-Biz POC approves an AOR, Grants.gov will send the AOR a confirmation email.	Only the E-Biz POC can approve AORs. This allows the organization to authorize specific staff members or consultants/grant writers to submit grants. Only those who have been authorized by the E-Biz POC can submit applications on behalf of the organization.	This depends on how long it takes the E-Biz POC to login and approve the AOR, once the approval is completed the AOR can immediately submit an application.

## Section VIII—Other Information

√ Step	Actions to take	Purpose	Time required
Step 5: Track AOR Status	What is your AOR status?  AORs can also login to track their AOR status using their username and password (obtained in Step 3) to check if they have been approved by the E-Biz POC.	To verify that the organization's E-Biz POC has approved the AOR.	Logging in to check your AOR status is instantaneous. The approval process to become an AOR depends on how long it takes the E-Biz POC to login and approve the AOR.